Financial Assistance and Project Management

Solar installation at Pueblo of Laguna's Majors Ranch (Photo courtesy of Sacred Power Corporation and Diversified Manufacturing Systems)

Presentation Outline

- ✓ **Overview**
- ✓ **Competitive Process**
- ✓ **Project Pipeline**
- ✓ **Project Management**
- ✓ **Project Accomplishments**

Solar Installation on **Navajo Reservation**

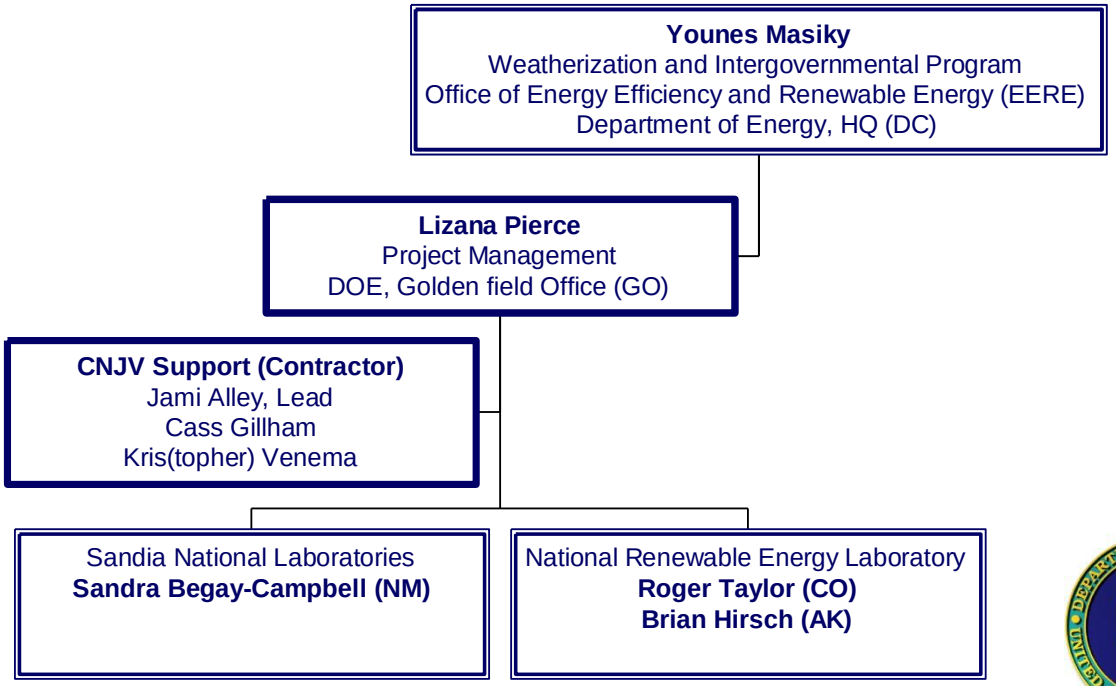
Organization

Program Management through DOE Headquarters, implementation through the DOE Golden Field Office, and technical support through the DOE's Laboratories

Program Management

Implementation

Technical Assistance



Roles and Responsibilities

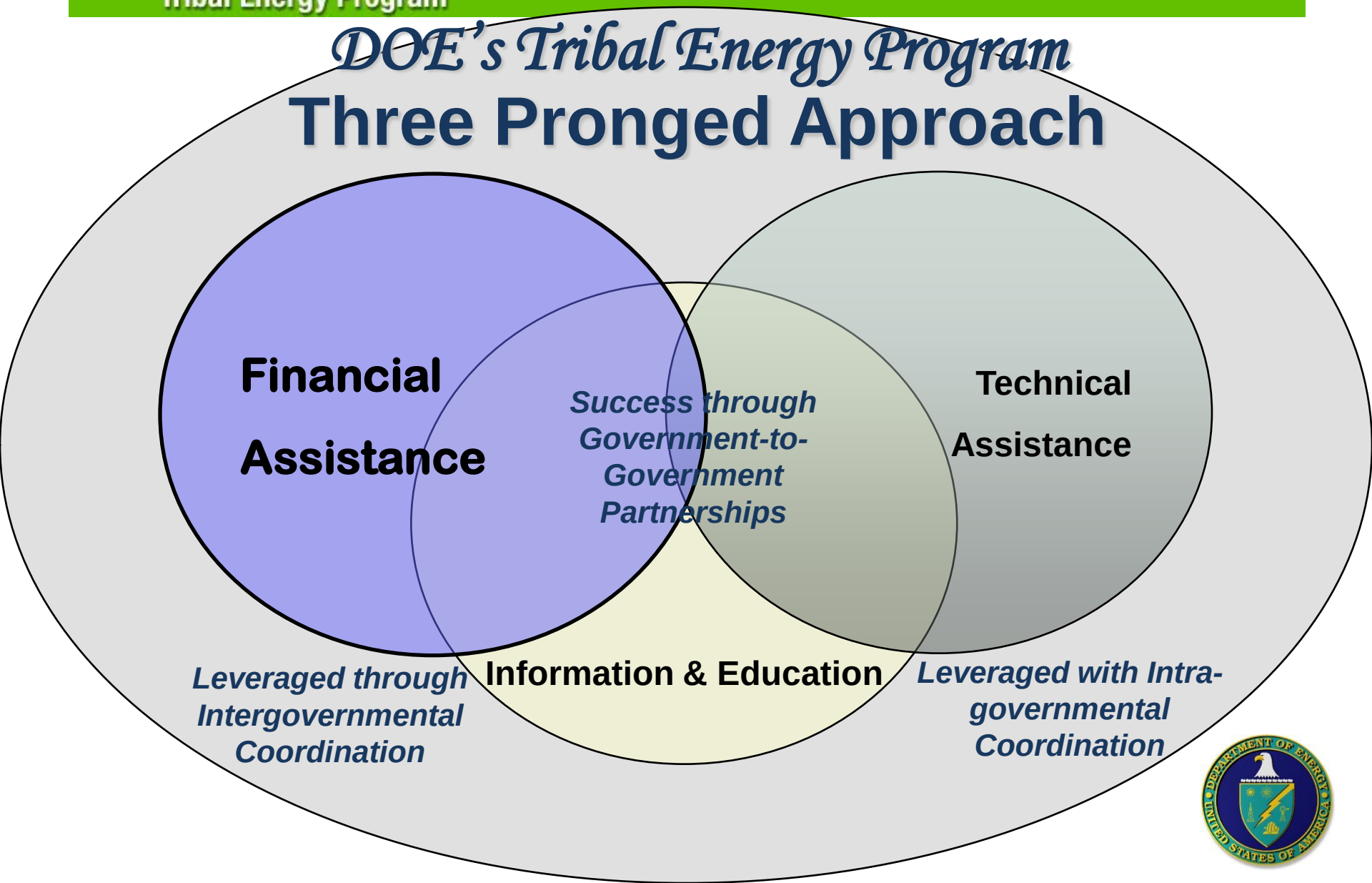
Project Management (DOE, GO)

Field implementation for administering and managing partnerships with Tribal Governments

- Issues funding opportunity announcements
- Plans, organizes and chairs merit review process
- Manages resultant projects and earmarks
- Developed and manages the program website
- Promotes the program
- Leverages other DOE programs
- Facilitates coordination among other field organizations
- Provides technology transfer and information dissemination

DOE's Tribal Energy Program

Three Pronged Approach



Providing Financial Assistance

Providing financial and technical assistance to Tribes for the evaluation and development of renewable energy resources and energy efficiency on Tribal Lands

Eligibility:

Federally-recognized Tribes, Tribal Energy Resource Development Organizations, or Tribal Consortia (two or more entities, at least one of which is an Indian Tribe).

Tribal Lands include Indian reservations; Public domain Indian allotments; Former Indian reservations in Oklahoma; Land held by under the provisions of the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.); and Lands held in fee simple or under a Federal land lease.

Funds Awarded through a Competitive Process

FY2011 Financial Assistance

Financial Assistance to Spur Deployment in Indian Country

- **First Steps Toward Developing Energy Efficiency and Renewable Energy on Tribal Lands**
  - Strategic energy planning
  - Energy options analysis
  - Energy organization development
  - Human capacity development
- **Energy Efficiency Development and Deployment in Indian Country**
  - Feasibility Studies
  - Installation of energy efficiency improvements
- **Renewable Energy Development and Deployment in Indian Country**
  - Feasibility Studies
  - Development (pre-construction) activities
  - Deployment (construction) activities

Solar arrays on home on the **Navajo Nation**

Competitive Process

Planning → Preparation → **Issue & Announce** → Submittal → Evaluation → Selection → Negotiation → Award

- ✓ **Planning**
- ✓ **Preparation of the Solicitation**
- ✓ **Announcements and Notification**
- ✓ **Submittal of Applications**
- ✓ **Evaluation**
- ✓ **Selection**
- ✓ **Negotiation**
- ✓ **Award**

2.0 KW PV Array for Dulce High School on **Jicarilla Apache Reservation**

Competitive Process

Planning → Preparation → Issue & Announce → Submittal → Evaluation → Selection → Negotiation → Award

Planning

- ✓ **Peer Reviews (2001, 2004, 2006)**
- ✓ **Strategy Session (December 2001)**
- ✓ **Annual Surveys (Program Reviews)**

Preparation of the Solicitation

- ✓ **Tribal Priorities (Surveys)**
- ✓ **Congressional Language**
- ✓ **Available Funding**

Solar Education Trailer **Oneida Nation** (Wisconsin)

Competitive Process

Planning → Preparation → Issue & Announce → Submittal → Evaluation → Selection → Negotiation → Award

Issue

- ✓ **Post Announcement**
  - **FedConnect**
  - **TEP Website**
- ✓ **10 FOAs issued since 2006 (15 total since 2002)**

Announce

- ✓ **DOE Press Release**
- ✓ **Email Notices (3,000+ Email List)**
- ✓ **Grants.gov**
- ✓ **Other Methods**
  - **Mailings (572 tribes)**
  - **Federal Register**
  - **Magazines/Newspapers**

Solar Installation at **Pueblo of Laguna's** Majors Ranch in New Mexico

Competitive Process

Planning → Preparation → Issue & Announce → Submittal → Evaluation → Selection → Negotiation → Award

Submittal of Applications

- ✓ **Electronic submittal required per the President's E-Gov Initiative**
- ✓ **368 received since 2006**

Samish Indian Nation (WA)

First Tribal Nation to Join EPA's Green Power Partnership by committing to obtain at least 10% of their electricity from renewable energy sources within the next year.

Competitive Process

Planning → Preparation → Issue & Announce → Submittal → Evaluation → Selection → Negotiation → Award

Evaluation

- ✓ **Initial Review (Compliance & Technical)**
  - The applicant was eligible for an award;
  - The information required by the FOA was submitted;
  - All mandatory requirements were satisfied; and
  - The proposed project was responsive to the FOA objectives.
- ✓ **Independent Review**
- ✓ **Federal Consensus Review**
- ✓ **Selection Official (SO) Review**

Turbine Installed at **Rosebud Sioux Reservation** in South Dakota

Competitive Process

Planning → Preparation → Issue & Announce → Submittal → Evaluation → Selection → Negotiation → Award

Selection

- ✓ **Selection Official is typically the Program Manager**
- ✓ **Generally relies solely on Merit Reviewer recommendations**
- ✓ **Program Policy Factors**
  - **Amount of Available Funds**
  - **Diversity of Project Type**
  - **Geographic Diversity**
- ✓ **Total 103 applications selected for negotiation of award since 2006**

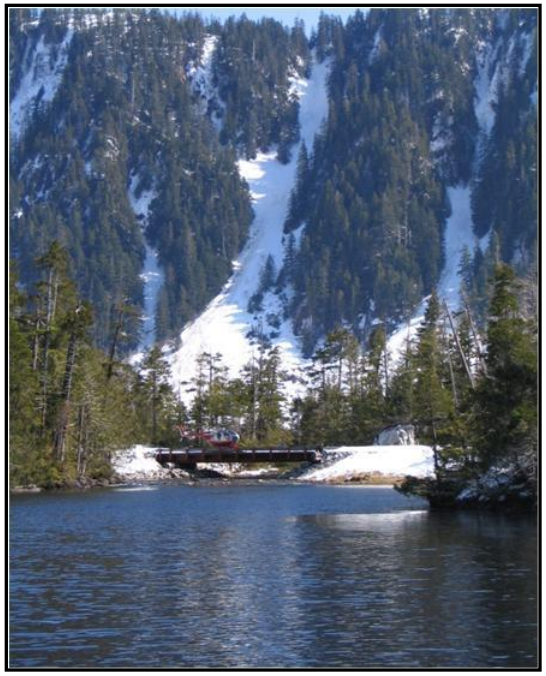
Wind Turbine (67 kW) Installed at **Fort Berthold Reservation** (ND) September 2005

Competitive Process

Planning → Preparation → Issue & Announce → Submittal → Evaluation → Selection → Negotiation → Award

Negotiation

- ✓ **More Reviews**
  - Technical cost and scope review
  - Financial reviews (A-133/EPLS)
  - Past Performance
  - NEPA review & determination
- ✓ **Program Package Preparation**
  - Statement of Project Objectives
  - Reporting requirements
  - Budget
- ✓ **Negotiation**
  - Call to discuss and agree upon scope and budget
  - Brief recipient on award requirements



Haida Corp's
Reynolds Creek 5MW Hydro Project in Angoon (AK)

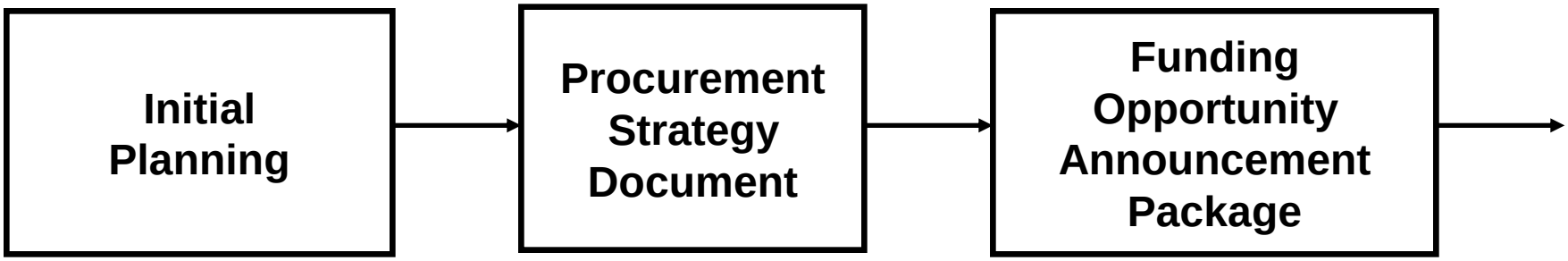
Competitive Process

Award

- ✓ **Procurement Package Preparation**
  - Indirect rate review
  - Negotiation memorandum
  - Payment Method determination
  - Terms & Conditions
- ✓ **Yet More Reviews**
  - Specialist review
  - Peer review
  - Legal review (above thresholds)
  - Contracting Officer (CO) review
- ✓ **Award**
  - CO signs & posts to FedConnect

Rosebud Sioux's (SD) Little Soldier Turbine - Pursuing a 30 MW and 190 MW Wind Farm

Competitive Process Metrics (2011)



- Define Requirements
- Funding Availability
- Identify Schedule

- Refine Requirements
- Obtain formal agreement

- Procurement Request
- Funding Announcement
- Evaluation and Selection Plan
- Restricted Eligibility
- Announcements

Typically 12-month process

Competitive Process Metrics (2011)

Announce and Post Solicitation

Post on FedConnect
Linked to Grants.gov

Q&A's

Respond to questions. Post on FedConnect or issue amendments.

- **Responded to 100 formal Q&A's**

Review Panel

Reviewers identified

69 members

MRC Appointments

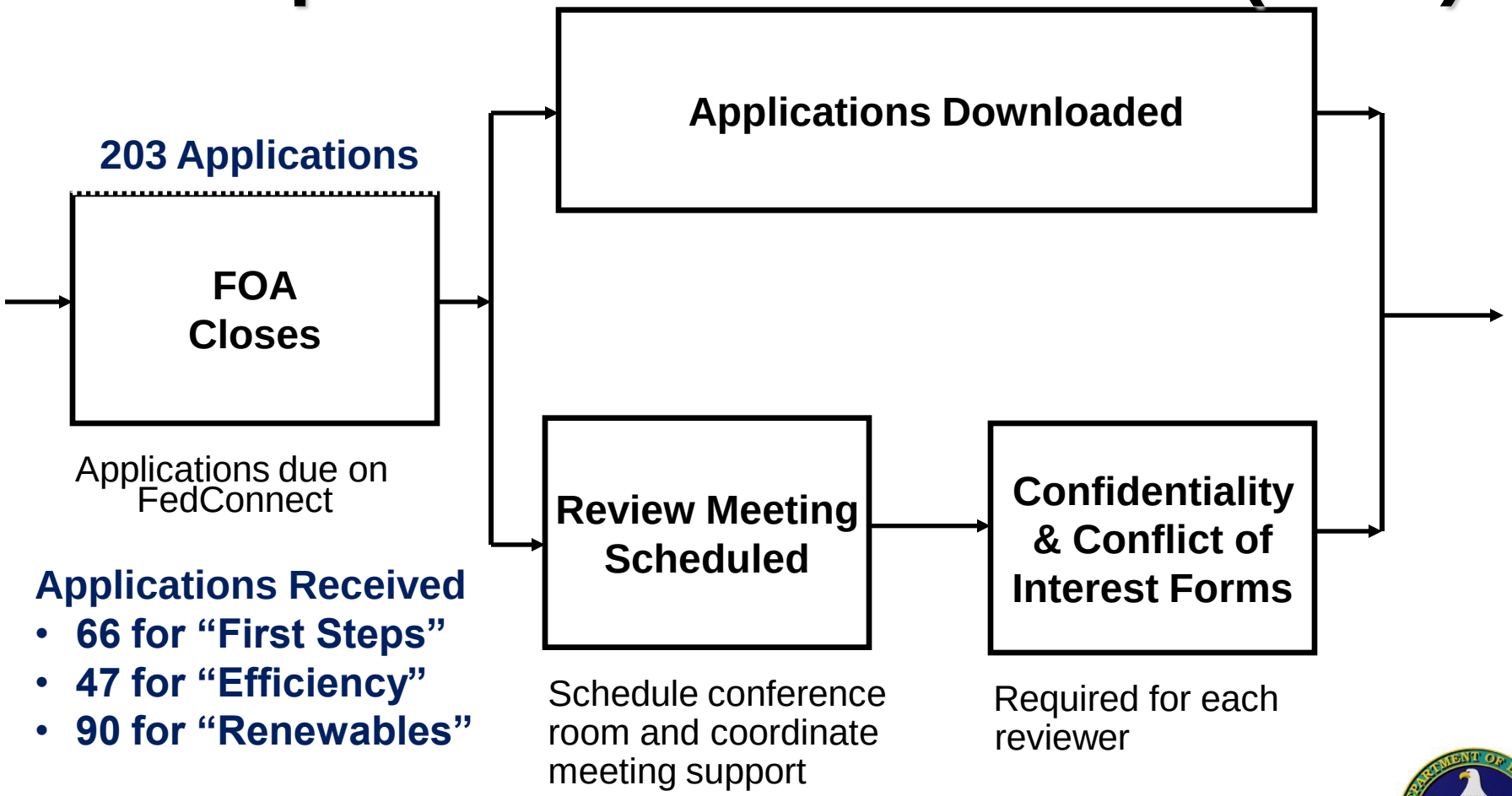
Selection Official appoints reviewers

Three (3) Solicitations

- **Posted on website**
- **Email notification**

Typically 12-month process

Competitive Process Metrics (2011)



Applications Received

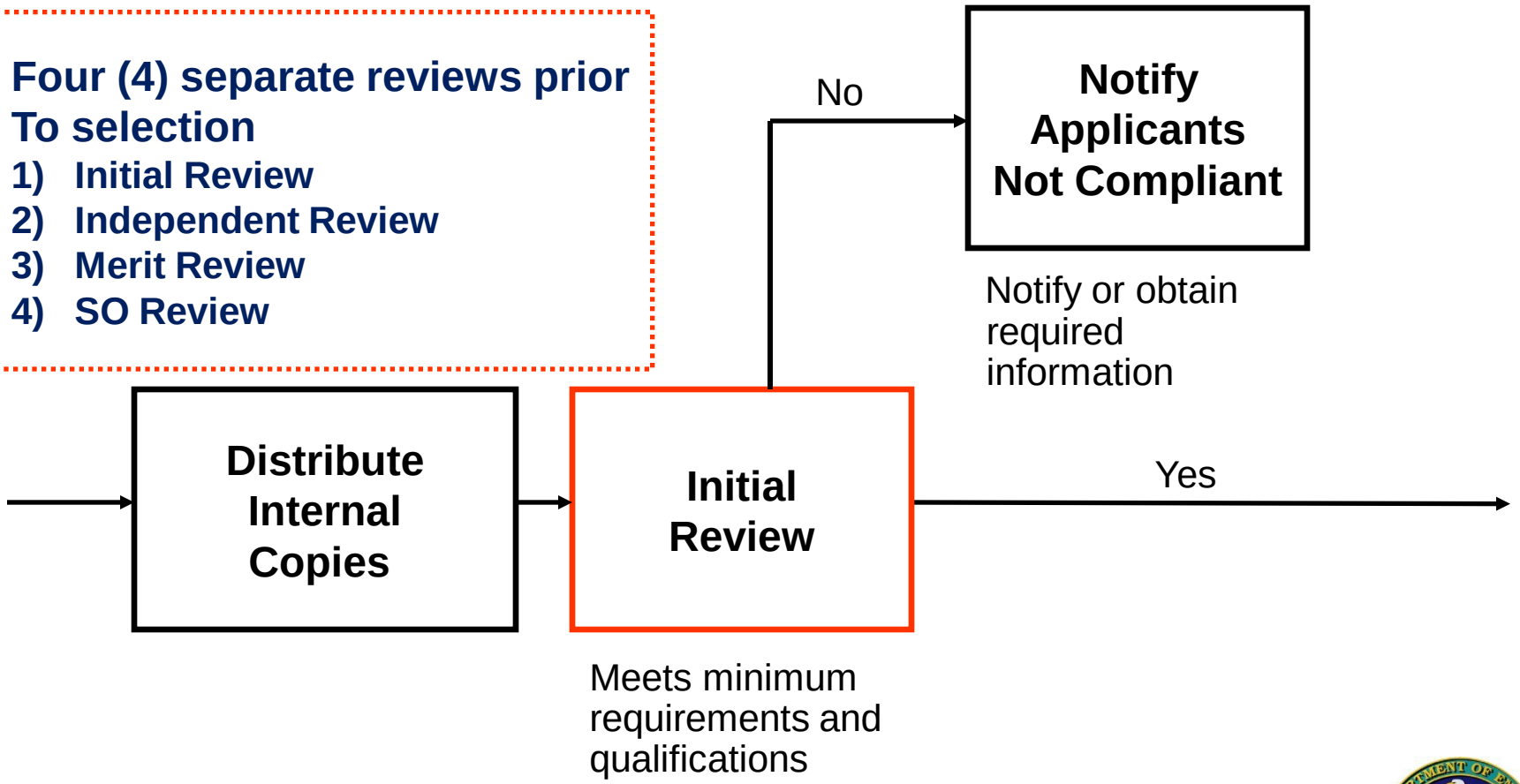
- **66 for "First Steps"**
- **47 for "Efficiency"**
- **90 for "Renewables"**

Typically 12-month process

Competitive Process Metrics (2011)

Four (4) separate reviews prior To selection

1) **Initial Review**
2) **Independent Review**
3) **Merit Review**
4) **SO Review**



Typically 12-month process

Competitive Process Metrics (2011)

Total 203 applications received (3 FOA's)

- **44 deemed non-compliant (21.7%)**
- **23 duplicative (11.3%)**
- **136 forwarded to MRC (67%)**

Typically 12-month process

Competitive Process Metrics (2011)

6 panels
27 reviewers

Discuss and develop consensus ratings and comments (Federal only)

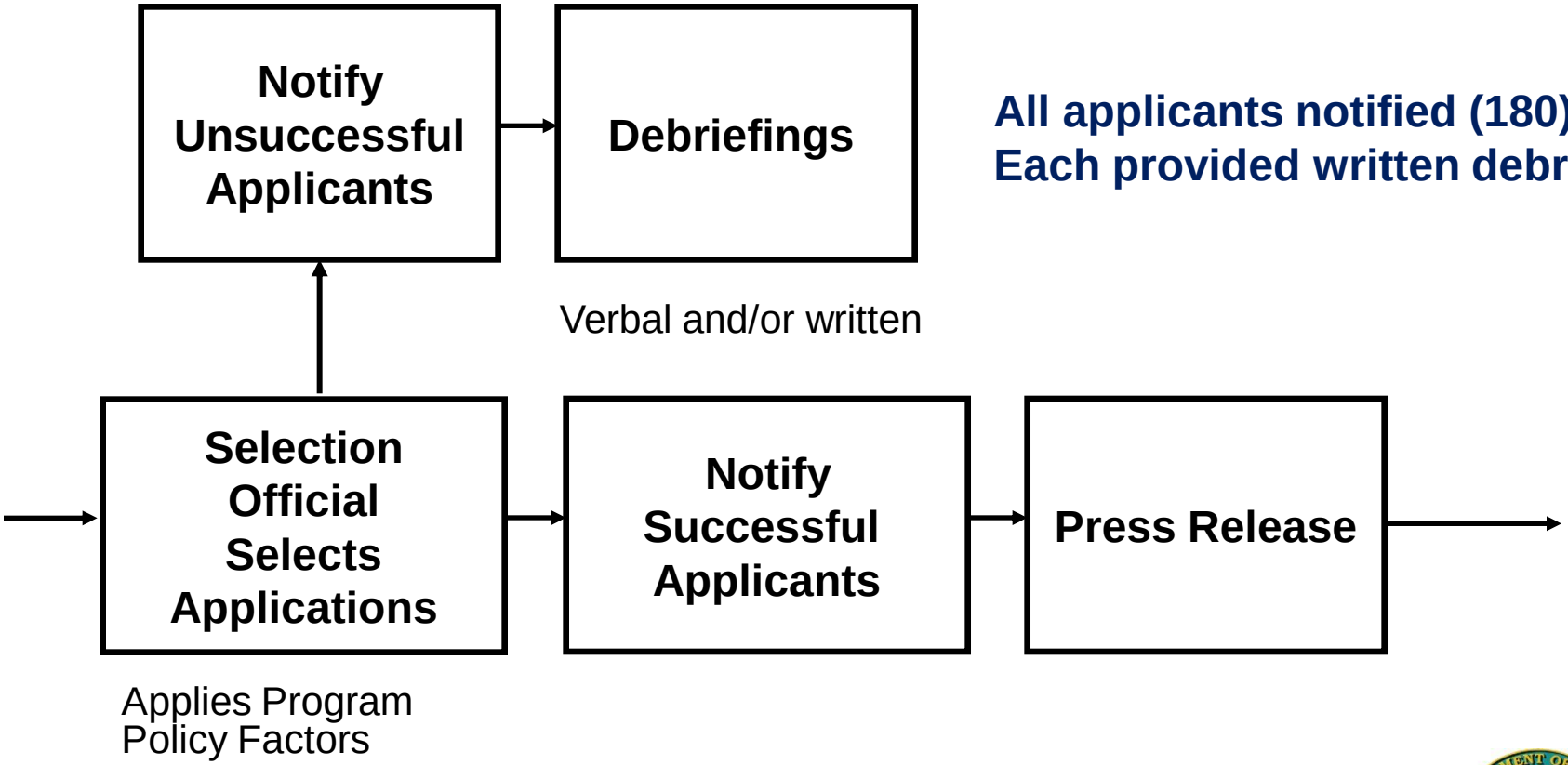
Chairperson documents process, results, and lessons learned

Chairperson may be requested to brief SO

Of 136 applications reviewed
Fifty-five (55) considered of merit (40%)

Typically 12-month process

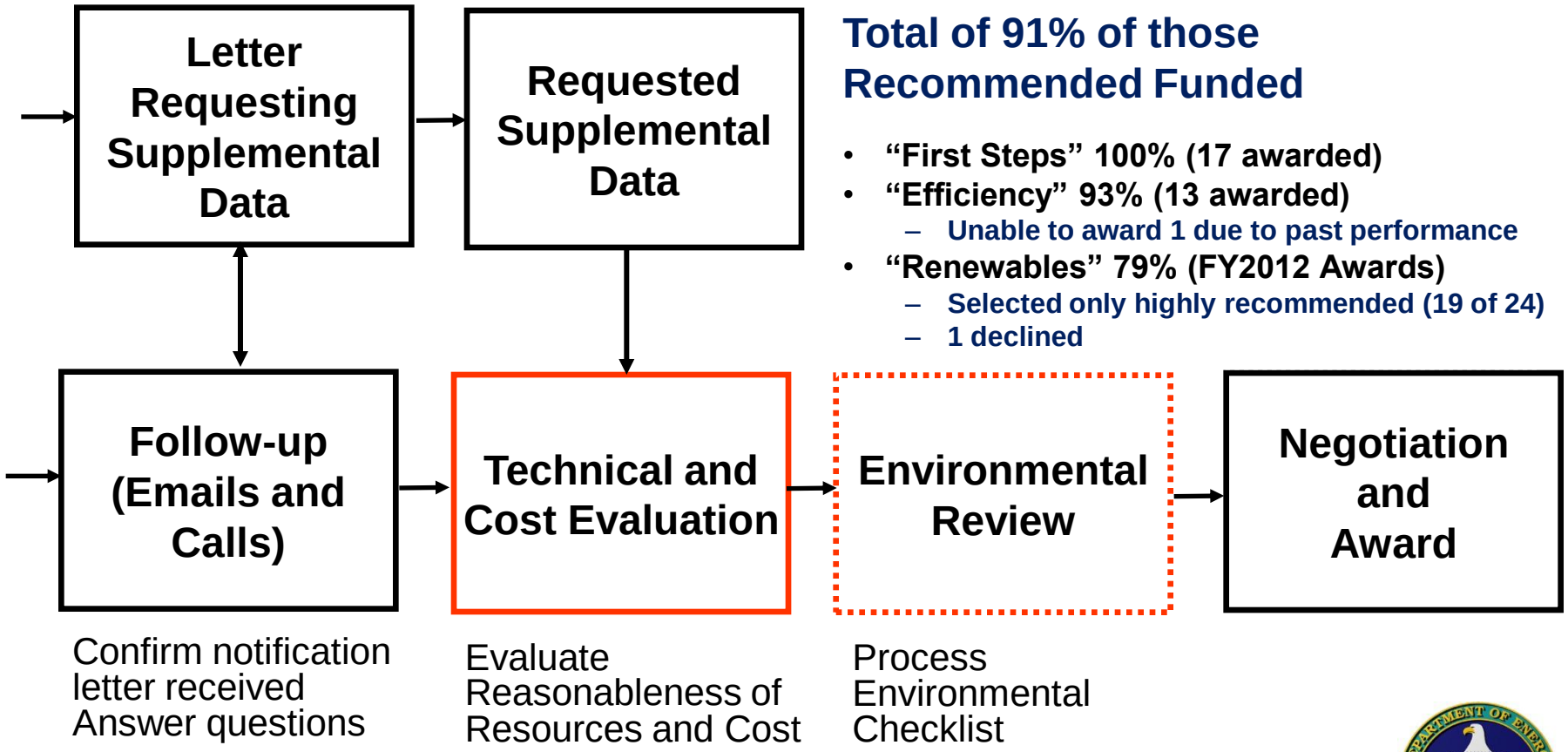
Competitive Process Metrics (2011)



All applicants notified (180)
Each provided written debrief

Typically 12-month process

Competitive Process Metrics (2011)

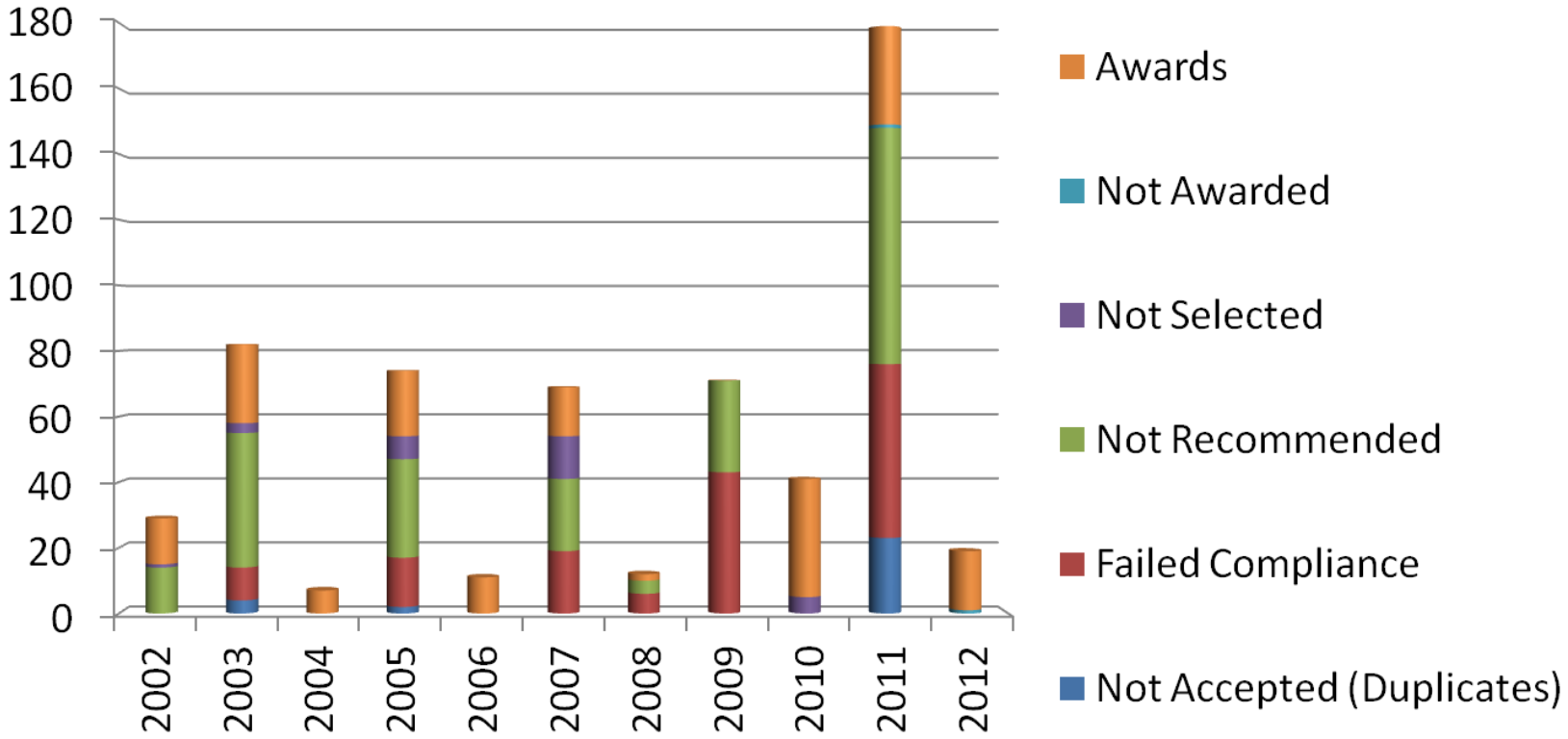


Total of 91% of those Recommended Funded

- **"First Steps" 100% (17 awarded)**
- **"Efficiency" 93% (13 awarded)**
  - **Unable to award 1 due to past performance**
- **"Renewables" 79% (FY2012 Awards)**
  - **Selected only highly recommended (19 of 24)**
  - **1 declined**

Typically 12-month process

Competitive Process



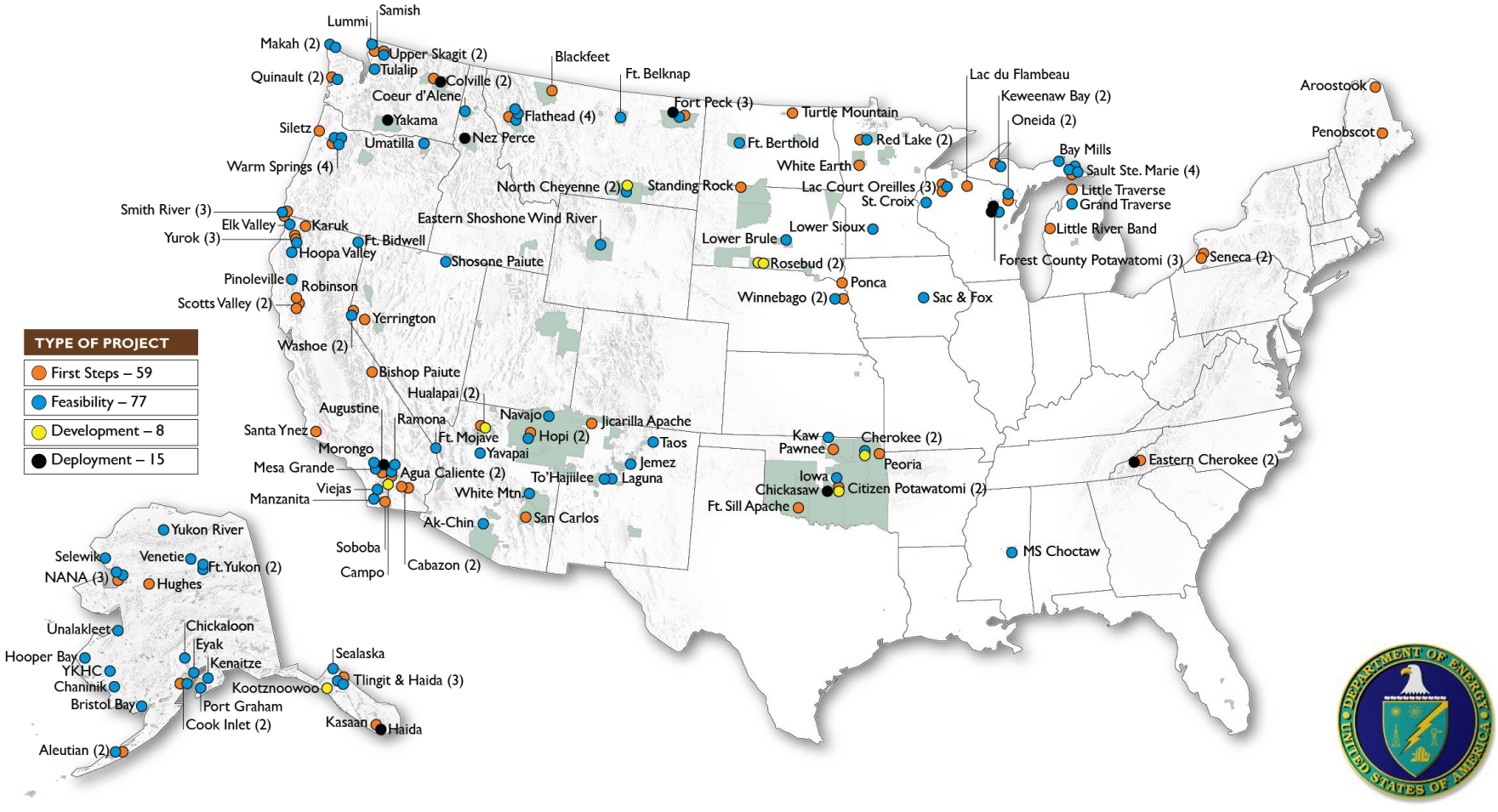
31.3% of All Applications Received Funded
(DOE average 5 to 10%)

Competitive Process (2002-2011)

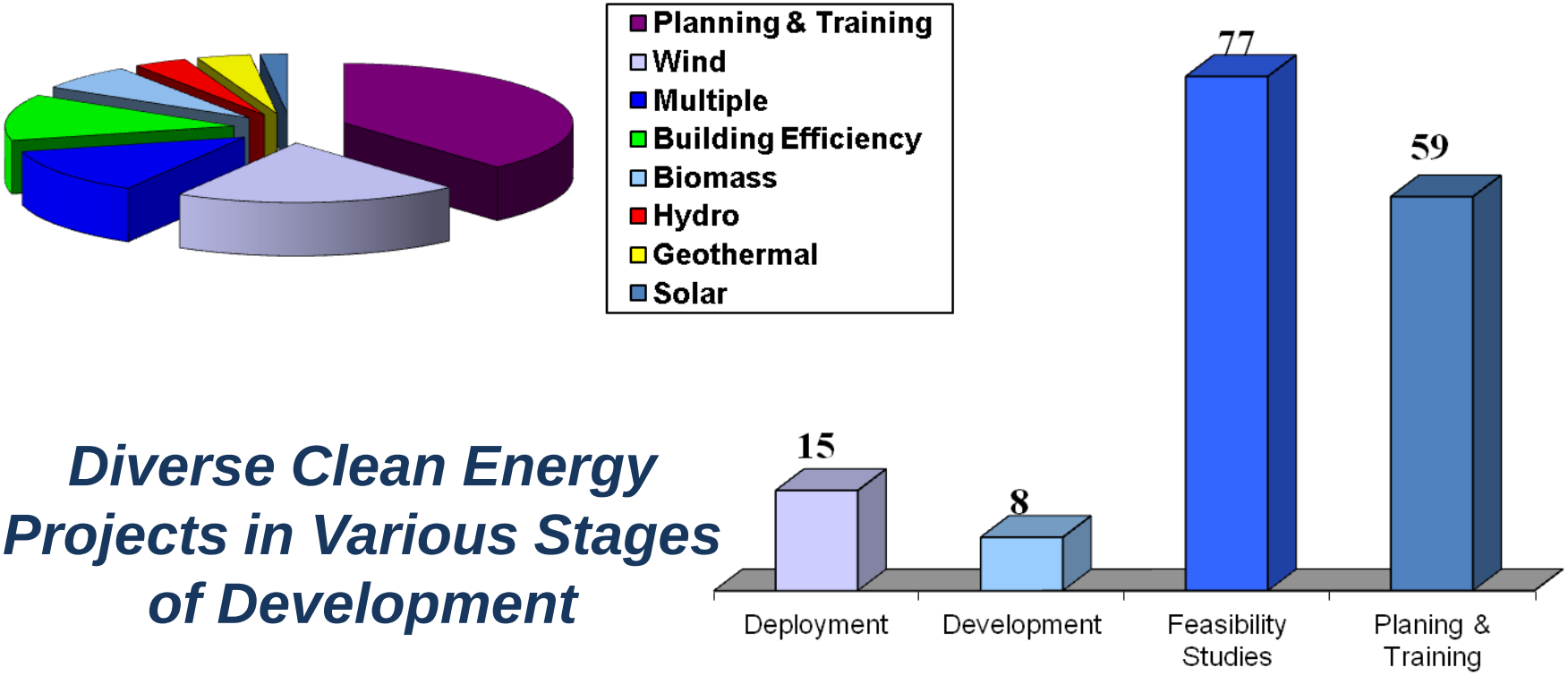
Accomplishments

- **85% of all meritorious applications funded** (Total of 177 of 208, including 18 planned in FY2012)
- **15 Funding Opportunities Announcements issued**
- **Total of 565 applications accepted** (timely and non-duplicates)
- **Funded 31.3% of all applications received (using multi-year funds, if needed). DOE average is 5 to 10%.**
- **50% of applications reviewed were deemed meritorious by the Committees** (Includes 208 of 419 forwarded for review)
- **Awarded $36 million to 159 projects (Average of $226,000 each)**
- **Funded 114 Different Tribes (20% of the 566 Tribes)**
- **73% of all discretionary funds directly to the Tribes**

DOE has Funded 159 Tribal Energy Projects Investing $36 Million *(2002-2011)*



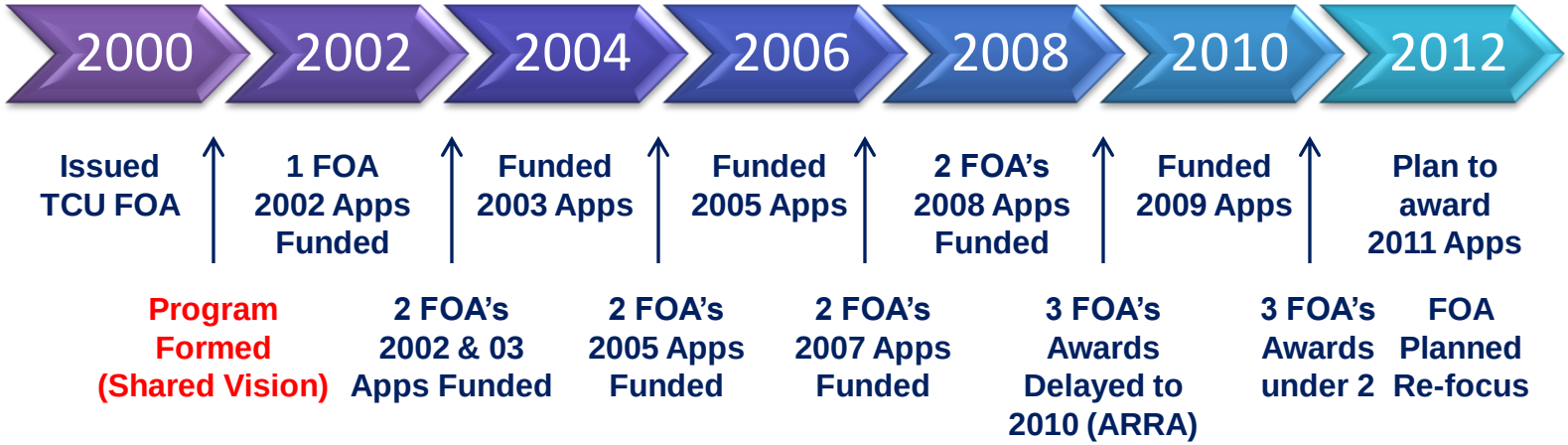
Project Pipeline

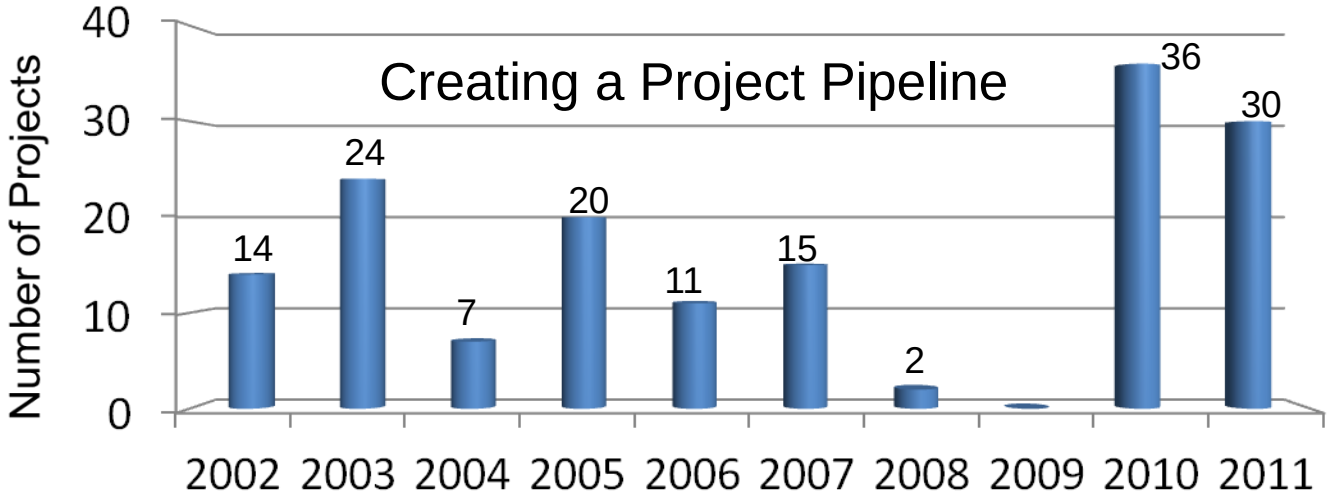


Diverse Clean Energy Projects in Various Stages of Development

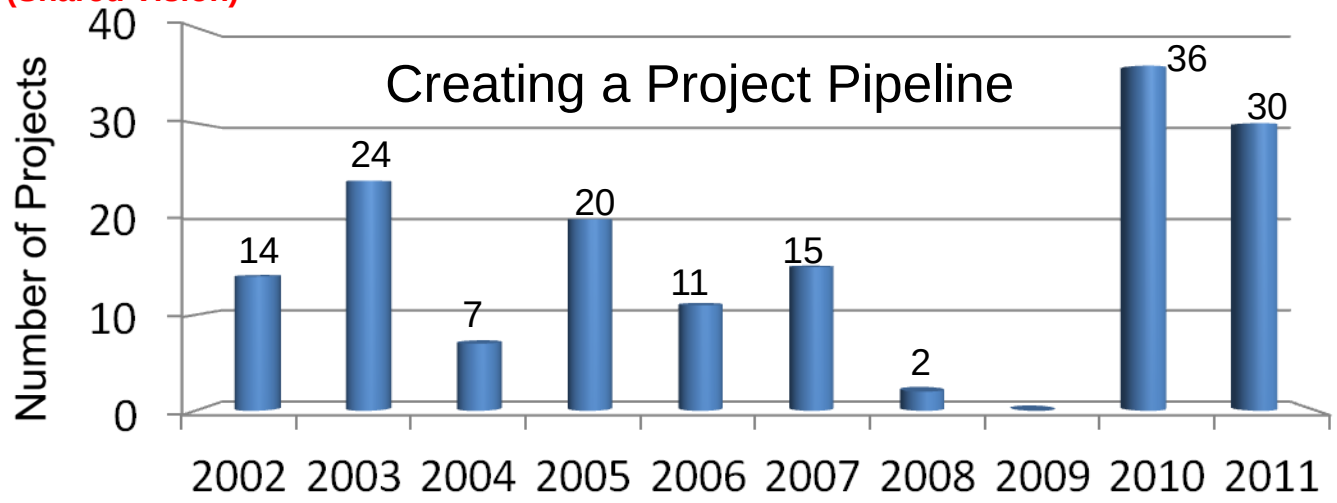
Assisting Tribes Fulfill <u>Their</u> Energy Vision

Project Pipeline

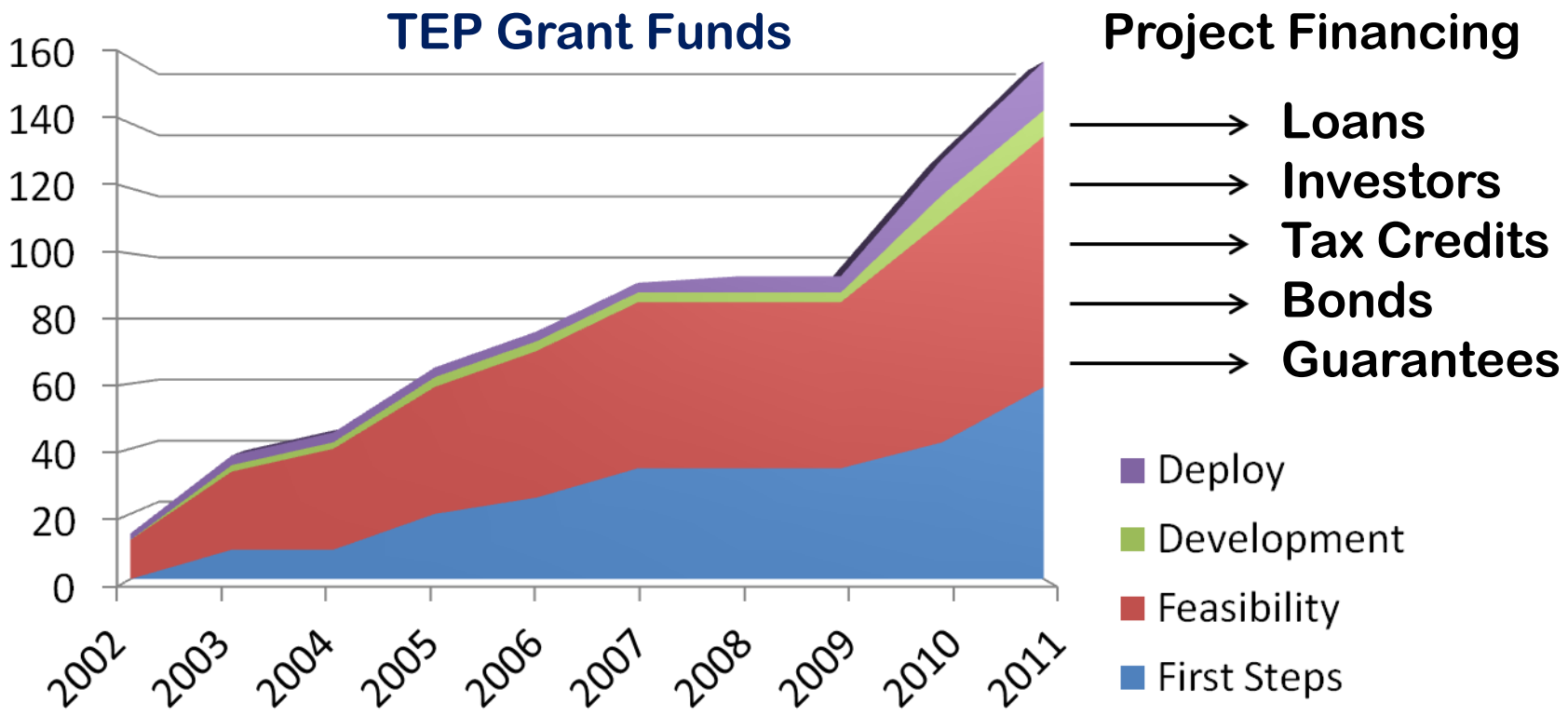




Project Pipeline



Project Pipeline



Investment in Tribal Energy Sufficiency

Project Management

Project Monitoring

- ✓ **Annual Program Review (Project Presentations)**
- ✓ **Quarterly Progress & Financial Reporting**
- ✓ **On-going Communications**
- ✓ **Site Visits (Limited due to ARRA and travel funds)**
- ✓ **Final Reporting**

Transparency
Project Summaries, Presentations and Final Reports Posted on TEP Website

Assiniboine & Sioux Tribes install two 50 kW wind turbines on the Fort Peck Reservation

Annual Program Review

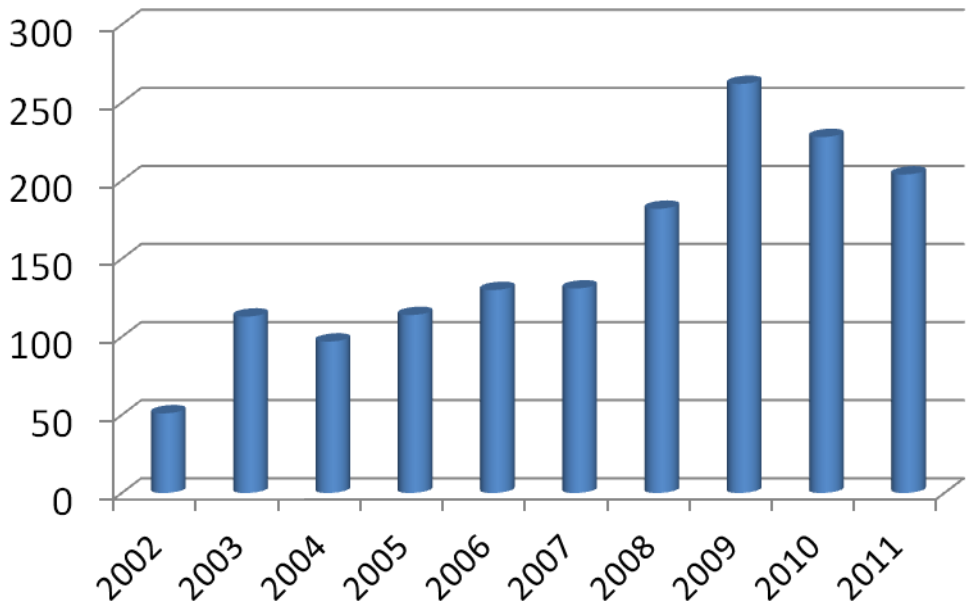
Unique Tribal Forum for Sharing and Learning

- Forum for Tribes to meet and learn from other Tribes pursuing energy sufficiency through renewable energy and energy efficiency, and share their successes
- Networking & learning opportunity
- Tribal project presentations – lessons learned
- Forty to fifty (40-50) Tribal energy projects presented
- Typically 200-250 participants

Held Each Year in Denver, CO

Annual Program Review

Unique Tribal Forum for Sharing and Learning



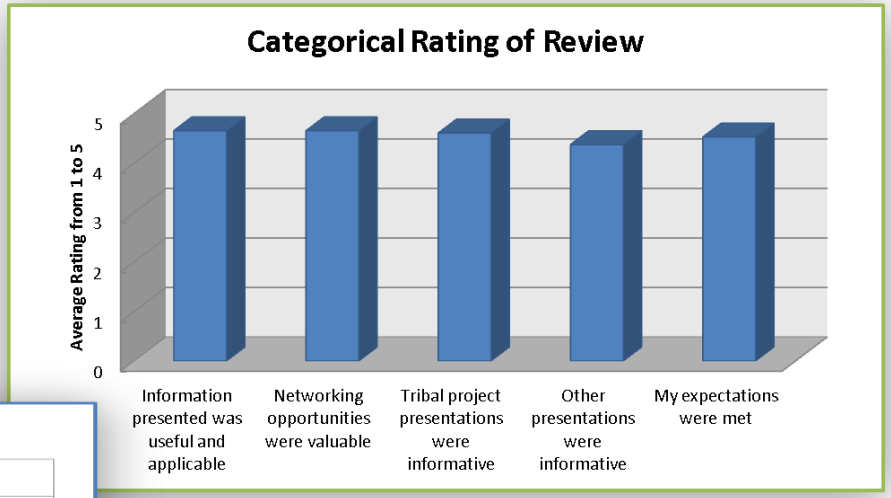
Over 1,500 attendees since 2002

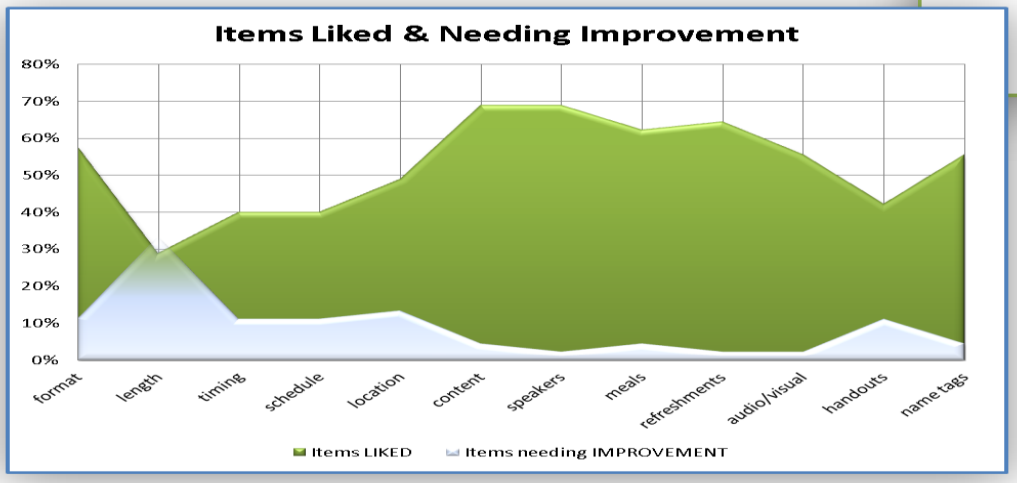
Over 390 tribal project presentations (posted)

Annual Program Review

Unique Tribal Forum for Sharing and Learning

- ✓ Eighty-two percent (82%) thought the review was very good to excellent with the content, speakers, and format marked high.
- ✓ All respondents' agreed that the presentations were useful and informative, the networking opportunities valuable, and that their expectations were met.
- ✓ Sixty percent (60%) thought the length of the review was adequate, however 31% thought the review was too long.





Annual Program Review Survey Results (2011)

"You guys do a great job creating a cooperative teamwork type environment where people share, learn from each other and work together to everyone's mutual benefit. " (2010)

"Thanks Lizana and DOE team!" (2010)

"Great conference! Made connections and generated ideas!" (2010)

Annual Program Review

Unique Tribal Forum for Sharing and Learning

"It was a lot to take in, in one week, but I feel that the participant list was a great idea, because it gives address and contact number. This was our first tribal energy program. Its been a great energy program, thank you very much!" (2010)

"This conference was very informative. I learned a lot from these meetings. It's good to hear from other Tribes struggles and strengths." (2010)

"More community energy efficiency education more integrated into the program. Excellent models thanks!" (2010)

"Topics were great, made many contacts that are already working with us!" (2010)

Project Accomplishments

Assisting Tribes Achieve Their Energy Vision

Deployment Projects (15) - Six (6) renewable energy projects representing

- **Over 6MW of new generation,**
- **Savings of 280,000 gallons of diesel and propane, and**
- **One substation installation (Colville), estimated to save $290,000 per year**

Colville Indian Power and Veneer Energy Substation (WA)

Council of Athabascan Tribal Government (CATG) Biomass Heating Project in Fort Yukon (AK)

Ramona Band (CA) Renewable Powered Eco-tourism Project

Project Accomplishments

Saving Energy for the Future

Deployment Projects (15) - Nine (9) Building Retrofit Projects

- **Retrofitting 64 Tribal buildings,**
- **Savings of over $600,000 per year,**
- **Minimum of 30% reduction in use, and**
- **Over 10,000 MBTUs saved**

Lighting upgrades could save the **Chickasaw Nation** (OK) $180,000 per year

Forest County Potawatomi Community installed 1,664 new LED lights for a 54% reduction in energy use (WI)

Forest County Potawatomi Community will retrofit Wunder Hall, a historic building on Concordia Campus (WI)

Project Accomplishments

Renewable Energy Development in Indian Country

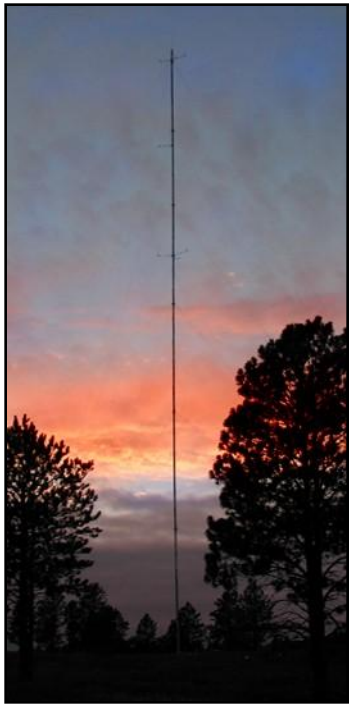
Development Projects (8)

- **Over 500 MW of new renewable generation, if deployed**

Campo Band's Wind Farm
DOE funding Phase II
(160 MW)

Hualapai (AZ) Exploring "large-scale" solar and wind development

Northern Cheyenne Tribe completed wind feasibility study and began pursuing wind 30MW wind farm (anemometer at sunset, MT)



Chaninik Wind Group's
Thermal Heating Project (AK)

Project Accomplishments

Assessing Indigenous Resources

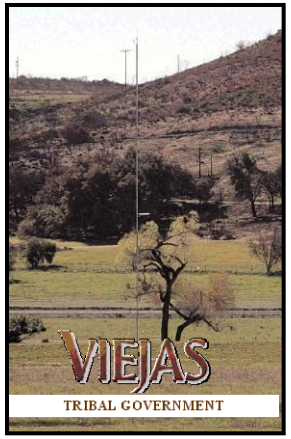
Feasibility Studies (77) - Renewables

- **Sixty-five (65) renewable energy feasibility studies**

Kaw Nation Wind Resource Assessment (OK)

Pueblo of Jemez Geothermal Feasibility Study (NM)

Makah Indian Nation Wind Feasibility Study (WA)



Viejas Tribal Government Tribal Utility and Wind Study (CA)

Three Affiliated Tribes Wind Feasibility Study (ND)

St. Croix Chippewa Biomass Study (WI)

Project Accomplishments

Assessing Indigenous Resources

Feasibility Studies (77) - Efficiency

- **Twelve (12) efficiency projects will result in energy audits to 250 tribal buildings**

Sault Ste Marie's Tribal Health Clinic and Community Center, one of 45 buildings which will have energy audits (MI)

Oneida Nation's Housing Authority will conduct energy audits on 44 buildings (WI)

Tlingit Haida Regional Housing Authority (THRHA) to conduct energy audits on over 50 buildings in Southeast Alaska (AK)

Project Accomplishments

Planning for the Energy Future

"First Steps" Grants (59)

- **Fourteen (14) human capacity grants,**
- **Twenty-six (26) Tribes developing energy plans,**
- **Thirteen (13) Tribes developing energy organizations, and**
- **Six (6) Tribes exploring energy options**

Ponca Tribe conducting an energy analysis and conducting community awareness under their "Project Earth Lover" Campaign (NE)

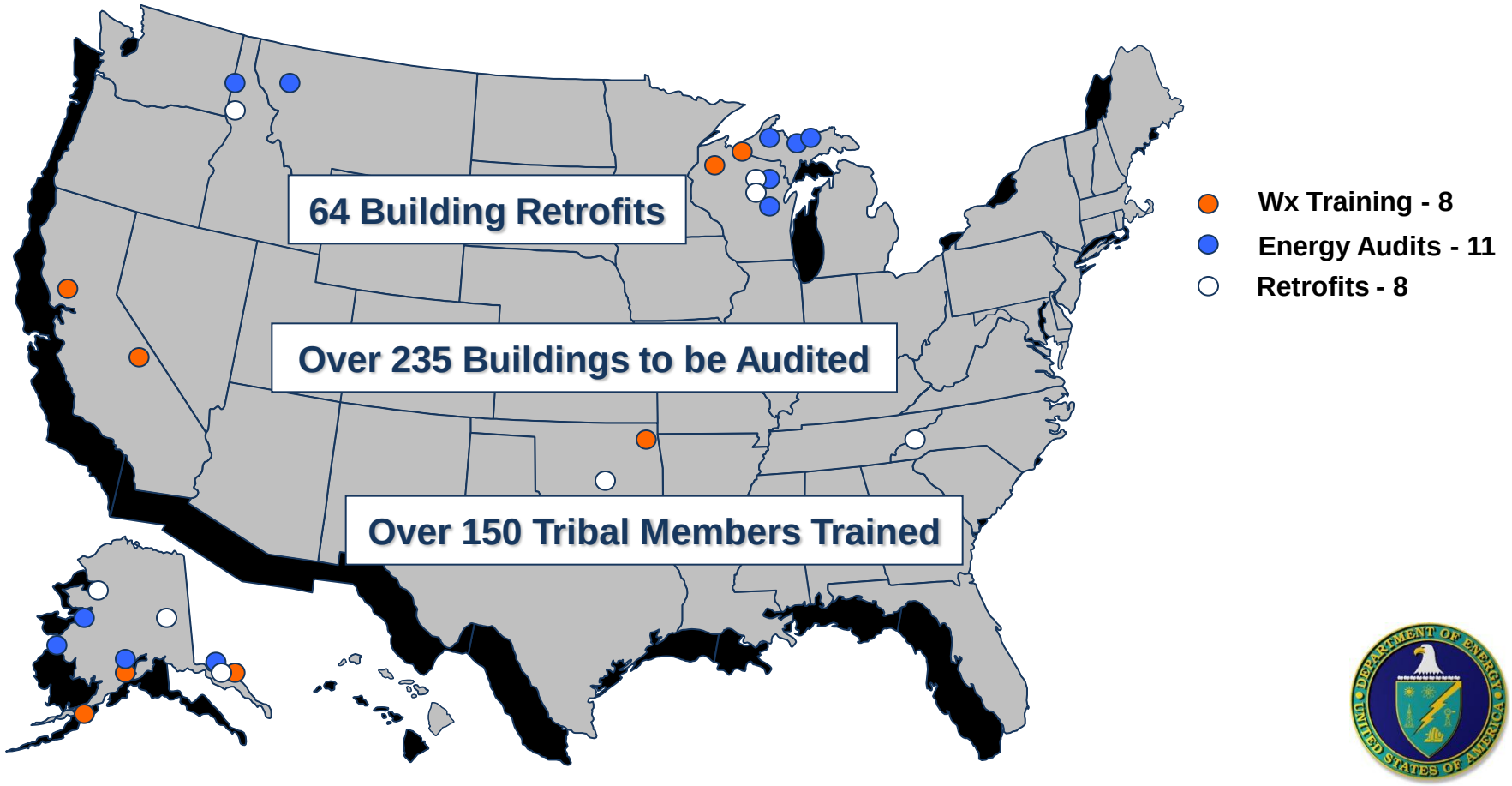
Seneca Nation conducted strategic energy planning (NY)

Cabazon Band of Mission Indians Energy Plan (CA)

San Carlos Apache conducting an energy options analysis (AZ)

Energy Efficiency & Wx Training Projects

Goal of Reducing Building Energy Use by 30%



Building Local Skills and Knowledge

Keweenaw Indian Community trained members in weatherization: 9 energy auditors; 8 envelop professionals; and 38 air sealing insulation installers. Logo contest winner shown above.

Cook Inlet Tribal Council training two apprentices in weatherization (4,000 hour program). Apprentices to graduate February 2012 and be hired to serve local communities.

Scotts Valley Band partnered with 12 Tribes in Lake and Mendocino Counties to build local capacity through education and training. Twenty-three members trained and 3 hired by the Tribes.

Energy Enabling Economic Development

Citizen Potawatomi Nation* (Oklahoma)

- Committed to using the earth (geothermal ground source heat pumps) to heat and cool their hotel/casino and member homes.

Humble Beginnings (1970)

*Ultimately not funded by DOE

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

Tribal Energy Program

Alaska Native Accomplishments

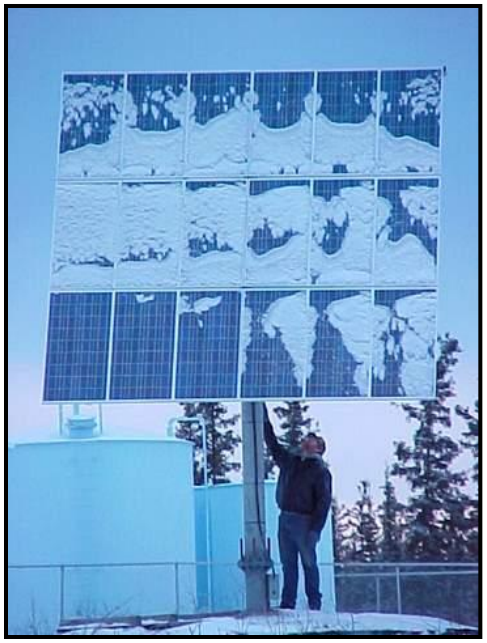
"Powering Remote Northern Villages with the Midnight Sun“

The villages of Venetie and Arctic, located above the Arctic Circle in northeast Alaska, studied the feasibility of powering the villages using renewable solar energy during the season of the midnight sun.

Native Village of Venetie Elders have chosen to:

- Adopt renewable energy and efficiency; and
- Banish oil dependency

Worlds Northern most Tribally owned Solar tracker



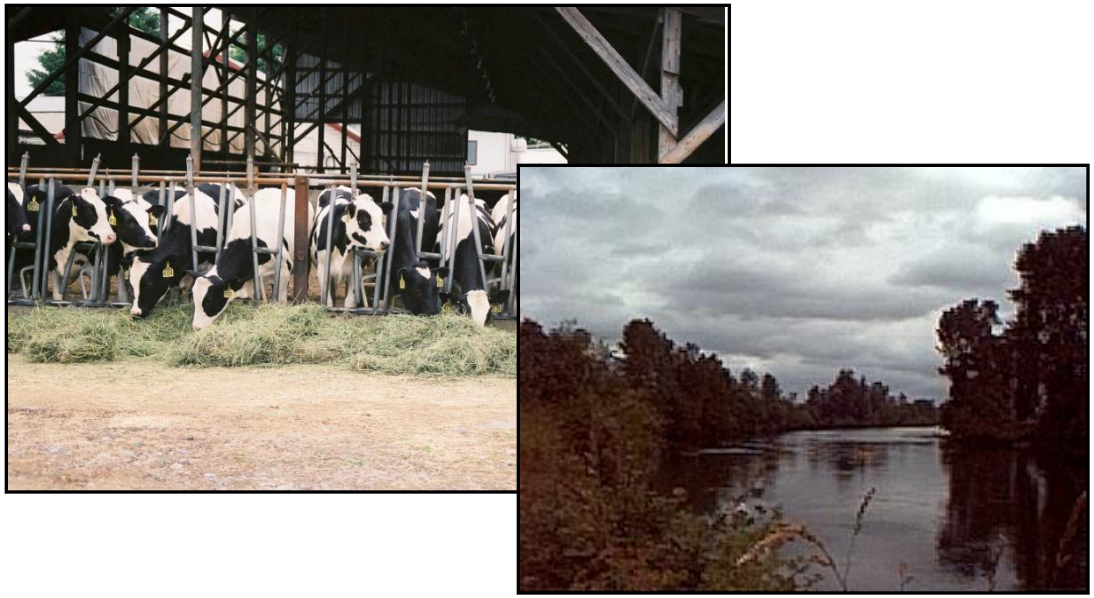
Solar System Maintenance in Alaska

Arctic Village Solar Arrays

Success through Partnerships

Tulalip Tribes (Washington)

- Anaerobic digester to use diary waste to reduce groundwater and salmon stream pollution from dairy operations - converting manure into electricity



- Sno/Sky Agricultural Alliance, a farmer's cooperative
- Quil Ceda Power, subsidiary of the Tulalip Tribes
- Northwest Chinook Recovery, non-profit organization to preserve, restore and enhance salmon habitat in the Puget Sound region

Making a Commitment to the Future

Augustine Band of Cahuilla Indians (California)

- Installed the "largest" (1.1 MW) solar electric system in Indian Country (February 2009)

"It's an important component of the Tribe's effort to eliminate its overall energy footprint, and is consistent with our centuries-old commitment to living in harmony with nature," Chairwoman Green said in a statement.

After receiving a DOE "First Steps" grant to develop an energy plan, the Tribe moved forward with the installation of this $7 million system.

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

Tribal Energy Program

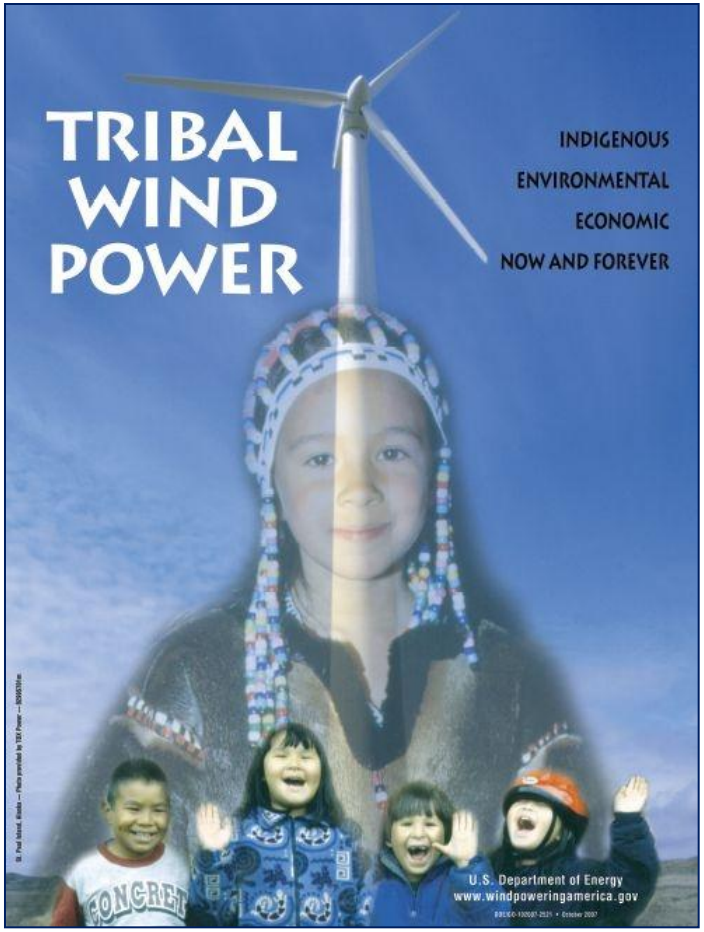
Tribes Leading the Way to Renewable Energy

Solar Installations at **Pueblo of Laguna's** Majors Ranch

Jicarilla Apache Reservation PV array on Dulce High School

Solar Electric Carport at **SIPI's** Science and Technology Building

Questions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